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1. [redacted] bomb. I do not know the details of the bomb, but the specifications for the "TONNE" guidance system are as follows:

Scan: 224 horizontal lines, non-interlacing, 50 frames/sec

Frequency of Operation: Approximately 70 cm

Control Channels: Three, using receiver intermediate frequencies of 8.4 mc, 10.4 mc, and 11.4 mc

Control of the bomb was through a simple radio command link. Approximately 10 - 20 complete "TONNE" systems were actually constructed at Obertannwald, but I do not know how many were available to the Soviets in 1945.

2. I remember a television receiver which was still under development at Obertannwald near the end of 1945. I do not recall

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the exact frequency of operation, but am positive that it was higher than that of the "TONNE" system, and probably in the vicinity of 20 cm. The scan was 220 lines, diagonal, non-interlacing at a rate of 12.5 frames/sec. The total band width was ± 500 kc. I believe that it was to be used as a replacement for the original receiver in the "TONNE" system.

3. In early 1946, the remainder of the Fernseh Group at Obertannwald, those who had not been deported to the USSR, were transferred to Siemens and Halske at Arnstadt, Germany. At that time, the firm was set up for radio receiver production, but Soviet orders specified an immediate and complete change over to the production of television receivers for domestic use. I was appointed Chief Television Engineer. Two bottlenecks to rapid conversion became immediately apparent:

   a. The old key employees of Siemens and Halske failed to give their utmost cooperation for fear of losing their positions to men more experienced in the field of television.

   b. Soviet expediters were more of a hindrance than a help.

   As a result, approximately eighteen months passed before production of television receivers actually began. By this time, Siemens and Halske employed a total labor force of approximately 1500 personnel. Two different types of receivers were produced and designated as Models T-1 and T-1A, one for the Moscow area and the other for Leningrad, although I do not recall which model belongs to which set of specifications. One of the models utilized 625 lines, the other 441 lines, both at a rate of 50 interlaced fields per second and frequency of operation in the five-six meter band. One was set up for two television channels, the other for one television channel, and one FM channel at approximately 45 mc. Both models had nine inch screens, one round, the other rectangular. The combined production quota was set at 300 receivers per month, although this goal was never realized. Production was increasing and had reached 150 units per month when I was transferred to Institute 380, Leningrad, in May, 1948. When I left, a total of approximately 500 receivers had been completed, 800 more were nearing completion and components for approximately 1000 were ready for assembly. A few 10 watt television transmitters were constructed for use in testing the receivers.

4. An attempt to develop television cameras at Siemens and Halske proved unsuccessful due to the lack of qualified engineers to construct super-iconoscopes. I heard a rumor that one laboratory at Siemens and Halske was attempting magnetron development, but have no detailed knowledge concerning this activity.

5. At Institute 380, Leningrad, only one type of television receiver was developed or produced. This was designated as the "KWN" model. The receiver featured straight through detection with no intermediate frequency stages, inter-carrier sound, four switched channels from 60 - 90 mc, and constructed for either 625 or 441 lines, depending upon its destination for consumer use. The screen was rectangular and measured approximately seven inches diagonally. I have no knowledge of production figures, raw materials required, or destination of the finished receivers.

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